ABSTRACT OF THE DISCLOSURE

In an optical transmission system: a first unit generates a first optical supervisory signal being arranged on the shorter-wavelength side of main signals and containing information for determining continuity of an optical transmission line and a second optical supervisory signal arranged on the longer-wavelength side of the main signals and used for supervisory control of optical communication; a second unit generates a wavelength-multiplexed signal by optically multiplexing the main signals and the first and second optical supervisory signals, and transmits the wavelength-multiplexed signal onto the optical transmission line; a third unit receives the wavelength-multiplexed signal, and optically demultiplexes the wavelength-multiplexed signal into the main signals and the first and second optical supervisory signals; and a fourth unit determines whether or not the optical transmission line is optically continuous, based on the first optical supervisory signal, and performs supervisory control of optical communication based on the second optical supervisory signal.